

KENNETH E. HUGHES CO., INC.
2035 LEMOINE AVENUE
FORT LEE, N. J. 07024
201-944-1600

Available in subminiature configurations, the C&K Series of Magnetic Logic Elements represent outstanding design/engineering devices for economical frequency scaling and timing control in real-time, digital data processing equipment!

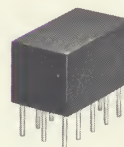
Specifically, Models 4333/4334 can be reliably utilized to perform a wide range of logical functions. For example, **and**, **or**, **inhibit**, and **complement** basic logic functions may be combined in multiples to implement any complex logic system!

Principal elements include (a) a **magnetic core**, (b) a **transistor**, and (c) a **passive delay network**. The transistor is connected to the core in such a way so it functions as a blocking oscillator. The **three** basic outputs are (1) a **voltage output available at the capacitor** (normally used to set flip-flops, trigger one-shots, etc.), (2) a **current output available at the output of the delay network** (used either as a set current to read in a "one" or as an **inhibit** current to prevent a "one" from being read in from some other source), and (3) a **current pulse available at the collector winding of the core** (used as a shift pulse for other magnetic logic elements).

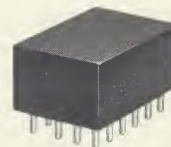
Most important, **low power consumption** characteristics provide desirable operating economies!

MAGNETIC
LOGIC ELEMENTS
MAGNETIC
CODE CONVERTERS
MAGNETIC
TIMERS

models 4333 4334 magnetic logic elements

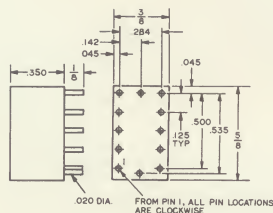
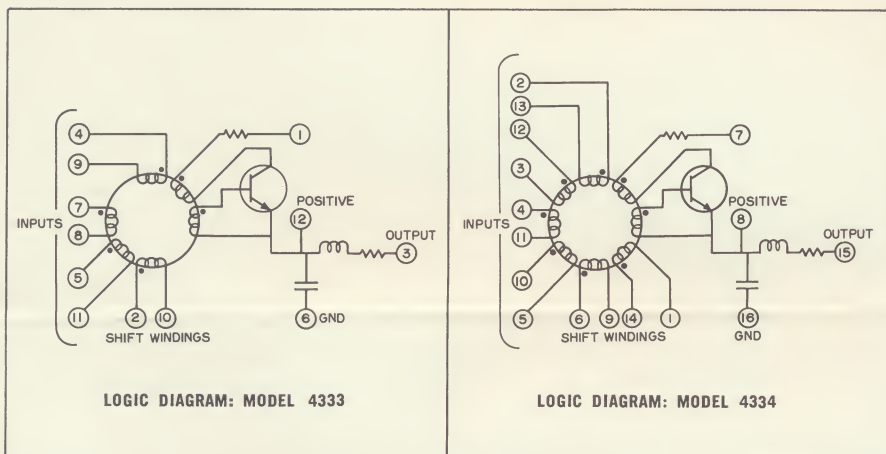


MODEL 4333

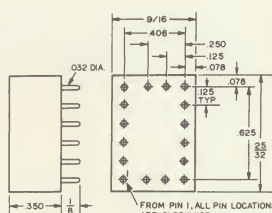


MODEL 4334

approx. actual size



Model 4333/Outline Drawing



Model 4334/Outline Drawing

electrical specifications

Operating Frequency0 to 250 kc.

Recommended Shift Pulse:

Nominal amplitude0.10 amp.
Rise & fall time (10% to 90%)0.2 μ sec.
Width (1/2 amplitude)0.5 μ sec.
Maximum voltage drop per bit across shift winding1.0 v.
for a "one"

Delayed output from LCR network:

Minimum amplitude30 ma.
Maximum fan out5 input windings in series

Undelayed output150 ma. peak
Nominal rise time0.1 μ sec.
Nominal pulse width (10% to 10%)0.7 μ sec.
Undelayed current pulse can shift up to 6 MLE's maximum.

Minimum signal noise ratio25:1

Nominal read-in current to input winding 30 ma. for 2 μ sec.

Nominal power supply voltage24 v. \pm 20%

Resistance between windings is greater than 2000 megohms at 500 volts (25°C ambient temperature).

Operating temperature range-55°C to +85°C